3.—THE ASSIMILATION OF THE FISHERY LAWS OF THE GREAT LAKES.

By G. A. MACCALLUM, M. D., Fish Commissioner, Ontario, Canada.

The immense expanses of water known as the Great Lakes and situated between the United States and Canada, or more properly between the United States and Ontario, have been, since the earliest times, among the best fishing-grounds in the world; indeed, Lake Erie has been judged by competent observers as having been at one time probably the best-stocked fish area known. Owing, however, to careless, excessive, and wasteful fishing, that which at one time was thought to be an almost inexhaustible source of wholesome fish food is rapidly ceasing to be a profitable fishing-ground, and if the enterprise of the governments of the two nations constituting their boundaries had not endeavored to keep up their stock by propagation and planting, it is almost certain that the time would already have arrived when the supply of commercial fish derived from these Great Lakes would be very limited. Canada students and observers of these fisheries have not been slow in attributing the rapid decline to the fact that few, if any, of the American States bordering on the Great Lakes, and under whose control the laws regulating the fisheries exist, have enacted a close season during which time the fish may be allowed to reach their natural spawning-beds to deposit their spawn as nature intended they should, this mode in former years having been found amply sufficient to keep those great bodies of water teeming with magnificent fish.

It can hardly be conceived that a nation so advanced in thought and all that pertains to the best laws of modern life as the United States should have thus far overlooked so important a factor in keeping up a supply of an article so valuable in the economy of the nation.

It may be stated without fear of contradiction that the United States are to-day doing a greater work in the tolerably new art of pisciculture than any other nation in the world, but why they should allow the main factor in the reproduction of fish life to be neglected is incomprehensible to many scientists. Take Lake Erie, for instance, and we will grant that the fishermen of the day have reduced their business to a fine art; they have, by close observation, defined the spawning and feeding grounds of the different fish, also the times or seasons when the different kinds of fish, through their instinct, migrate to those great breeding-grounds—migrate in myriads. Having determined this, is it not surprising that they should be allowed to spread out their engines of destruction and take in unlimited numbers fish—each representing thousands of its kind, if allowed to live and deposit its eggs as nature intended it should?

It may be true that fishermen and dealers will argue that it is only during the spawning season that these fish can be taken in paying quantities, but that is no con-

sideration when the preservation of fish life for future generations is to be provided for. It certainly is high time that the different States bordering on the Great Lakes should enact laws providing a close season at least for the great commercial fish—the salmonide. In no other way can the inevitable be long delayed. Although artificial culture and planting of fry is one of the greatest works of the age, the restocking of these depleted waters can not be accomplished by these alone.

The U.S. Fish Commission in one of its recent valuable reports states that—

In no other country in the world are there fewer regulations and restrictions in regard to the fisheries of the country, yet it would seem that, in view of the condition of the fisheries, some decided restrictions and regulations should be enforced if the industry is not to be abolished.

The same report says:

There is, however, a plea for the interference of the Government in certain cases, in regard to the fisheries that belong to the rivers or are near the shore, and, thereby, more specially related to the adjacent Commonwealth. Nearly all civilized nations have looked with more or less care after their interior or river fisheries and quite a number of the States of the American Union have their own special enactments on this subject.

This is true of the States which border on the Great Lakes, but as regards the fish which form the staple of the great fisheries of the international waters—the salmonide, as the whitefish, salmon trout, and herring—they have little or no regulation or close season, as will be seen from the following synopsis of the laws of those States:

Wisconsin: No close season for salmon trout, whitefish or herring; and trout, pike, bass, and maskinonge may be taken and sold during spawning season from any other waters than the inland waters of the State. However, it is provided that whitefish, and salmon trout must be stripped when taken and the spawn and milt mixed in a pail and the mixture thrown overboard—a very inadequate provision.

Minnesota: No close season for salmon trout, whitefish, or pike; close season for herring from November 10 to December 10.

Illinois: Though situated on Lake Michigan and not on international waters, this State has no close season for the Great Lakes, but has a close season from July 1 to April 1, as regards seines for waters wholly within its boundaries.

Ohio: Close season from June 15 to September 15, but none for whitefish or trout, albeit they do not allow nets to be placed on the reefs in Lake Erie.

Pennsylvania: Close season for speckled trout and salmon from August 1 to April 1; also for lake trout from October 1 to January 1, and for bass, pike, and pickerel between January 1 and June 1; but this does not apply to Lake Erie, although no netting whatever is allowed within a mile and a half of the shore.

New York: Close season for salmon trout, landlocked salmon, and lake trout in inland waters from October 1 to March 1; also a close season for black bass, Oswego bass, maskinonge, and pickerel from January 1 to July 1. Besides other special laws for special waters, it will be observed that there is no close season established for either whitefish, salmon trout, or herring in Lake Erie.

Michigan: Close season for inland waters for the salmonidæ from September 1 to May 1, but no close season for whitefish, salmon trout, or herring in the Great Lakes.

Thus it will be seen that, while there are State laws regulating fishery interests of inland waters, none of them, with one or two exceptions, have any restrictions or regulations whatever pertaining to the great international waters which lave their shores and furnish so important an article of commerce. The fish are left to shift for themselves and to be at the mercy of large moneyed fishing companies, whose only interest and object is, of course, to make all the money they can out of the industry, regardless of the length of time it may last or of the interests of posterity. Now, if we turn to the country bounding these great lakes on the north and examine its laws

for the protection and preservation of this most important and valuable industry we find that, founded upon the close observations of men appointed from time to time to study the habits of the different fish, certain close seasons, corresponding to the breeding season of each species, have been established, during which the fish may, unmolested, have access to their spawning-beds. Thus, for the most valuable commercial family, the salmonidæ, the month of November has been set aside, during which time they shall not be caught nor sold; for maskinonge and bass April 15 to June 15 is the close season; pickerel, April 15 to May 15.

These laws are carried out vigorously and are found to be in the interest not only of the fishermen but also of the masses. True, the Canadian fishermen do a good deal of grumbling in some localities where they can see their American cousins fishing during the whole time when they have to hang up their nets. It is human nature and not to be wondered at. They invariably assert that they would be perfectly content to abide by the laws, which they say they know to be reasonable and proper, if there were similar regulations on the United States shores; in a word, if there were an "assimilation" of the fishery laws of the Great Lakes.

Of course it is well known that there are difficulties in the way of accomplishing this uniformity of laws, inasmuch as in Canada the control of the international waters is vested in the Dominion Government, while with our neighbors the control is vested in the different States; at the same time no separate State can enter into a treaty with a foreign country—that right being reserved to the Federal Government; neither can Canada, which is a colony, form a treaty with another country, for by our Constitution that right is reserved to the British Government.

However, no one would say that the matter is impossible; indeed the agitation which has taken place within the last two years is already bearing fruit, for the Dominion Government and the United States Government have shown their appreciation of the work by appointing two experts to make inquiries upon all'the subjects urged At the risk of being considered egotistical, we claim the credit for the inception of this idea and of instituting this agitation by bringing into existence those conferences which have come to be known as the International Fish and Game Conferences, the history of which is as follows: In the autumn of 1890 I was intrusted by the Ontario Government with the presidency of the Ontario Fish and Game Commission, appointed to inquire into the condition of the fish and game of the Province and to suggest means for its propagation and preservation. We made extensive inquiries throughout the Province and then naturally turned to the great States to the south of us to inquire into the laws and regulations respecting these subjects and luckily found New York State codifying its fish and game laws. We first asked if we could confer with its commission, which was very courteously granted; in fact, the codification committee procured a delay in reporting, on purpose to confer with the Ontario commission, and a date was fixed for a meeting.

Then we conceived the idea of extending the representation at the meeting, and we wrote to the governors of the different States bordering on the Great Lakes asking that each one send a representative to meet with us to discuss the advisability of procuring a uniformity of the fish and game laws of the States and provinces bordering on the international waters. The idea was at once accepted and almost everyone promised to send a representative. We met in New York at the Fifth Avenue Hotel on October 12, 1891, Canada and several of the States being represented, the Federal Government also sending Dr. Hugh M. Smith, of the U. S. Fish Commission. A dis-

cussion of the situation took place and a committee was appointed, representing the bordering States, to meet at Rochester, November 10, 1891, where the subject of securing uniform legislation in the two countries was to be discussed, together with other interesting subjects. This was a very successful meeting, and the more the idea of uniform fishery laws for the Great Lakes was discussed and thought of the more it commended itself to those interested as being desirable.

The next of the international meetings was held in Hamilton, Ontario, December 9, 1891, and this meeting also was largely attended, and a great deal of interest was evinced in the discussion of the assimilation of the fishery laws of the two countries. The last meeting was held in Detroit on December 21 and 22 of 1892. This was a very important meeting, and was largely attended by representatives from all the States interested, as well as Ontario. The Dominion commissioners, appointed to make inquiries concerning the Ontario fisheries, also attended and took part in the discussions, as did a number of large owners of fishery interests. The result of this meeting was that certain important resolutions were adopted. These were as follows:

- 1. All small fish, and those unfit for food of all kinds, when taken in nets should be replaced in the water where taken alive, and that fishermen should not be allowed to take such fish on shore nor expose them for sale.
 - 2. That no string of pound nets used in the lakes shall extend more than 4 miles from shore.
- 3. That one-half part of all channels between islands and elsewhere where fish migrate to spawn shall be kept free from nets of all kinds at all seasons.
- 4. That all whitefish taken of less than 16 inches in length and all salmon trout less than 2 pounds in weight shall be immediately returned to the waters where taken and shall not be exposed for sale. That all herring less than 8 inches in length and all wall-eyed pike less than 12 inches in length shall be returned to the waters where taken and shall not be exposed for sale.
- 5. That the month of November in each year be made a close season in all the Great Lakes for whitefish, herring, and salmon or lake trout.
- 6. That in the judgment of this conference there should be a close season for black bass, and that such season should be between the 1st of April and the 15th of June, and all kinds of fishing, including spearing, should be prohibited in the close season.

Your committee would further recommend that all penalties fixed for violations of any laws that shall be enacted shall be made not only to apply to those who take fish, but also to all persons who buy, sell, transport, or have the same in possession.

It may be seen from this that some real work has been done by these international fish conferences in laying out what work is to be done in the future. One thing is admitted by all—that our joint fisheries in the Great Lakes are rapidly on the decline, and that it is absolutely necessary that some steps be taken, and at once, by those legislatures interested to prevent, by enacting judicious laws and regulations, the failure of this most valuable heritage. It is plain from the evidence of the best authorities that the same close season will apply to all parts of these great waters, as there is very little variation in the time of spawning of the salmonide, the most important commercial fish of the area. Canada is perfectly willing to abide by the close seasons, which are already embodied in her law, if the different States bordering on these waters will enact and enforce the same laws, or such as may be agreed upon, which must conduce to the improvement of the fisheries. It would add greatly to the prospect of securing such legislation if this large and influential Congress should see fit to recommend, by a suitable resolution, the adoption of the resolutions passed at the Detroit meeting December 21, 1892, and thus further the movement for procuring uniformity of the fishery laws of the Great Lakes.